Analytical Resources, Incorporated
Analytical Chemists and Consultants

August 28, 2006

Ben Hung
Anchor Environmental
6650 SW Redwood Lane, #110
Portland, OR 97224

RE: Client Project: 050332-01
ARI Job No. JQ30

Dear Ben:

Please find enclosed the original chain of custody documentation and the data package for samples from the project referenced above.

Two samples were received July 21, 2006 for a suite of Geotechnical testing. Soil samples were well iced and the cooler temperatures measured by IR thermometer following ARI SOP were 1.5-5.5° C for chemistry samples which is within recommended limits. Samples were received in good condition with no discrepancies in paperwork.

Problems associated with these analyses are discussed in the Case Narrative.

An electronic copy of this package will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Susan Dunnihoo
Client Service Manager
sue@arilabs.com
206/695-6207

Enclosures

cc: eFile JQ30

SD/sdrd

VQ30

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number:	Turn-around Requested: 15 business days
ARI Client Company: ANCHOR ENVIRONMENTAL	Phone: 503-670-1108x21
Client Contact: BEN HUNG	
Client Project Name: T4 EARLY ACTION	
Client Project #: 050332-01	Samplers: BH/EA/KT

Page: 1 of 15

Date: 7/21/06 | Ice Present? Yes

No. of Coolers: 19 | Cooler Temps: 1.5 - 5.0 - SOIL; 26° - 28° - CARBOYS

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	ACOE Column Settling Test w/TSS + Turb	Grain-Size	Specific Gravity	Specific Gravity >0.074 mm	Specific Gravity <0.074 mm	Atterberg	Moisture		Notes/Comments
T4-COMP-01			Water + Sediment	2 SED 9 water	X	X	X	X	X	X	X		45 gallons of
T4-COMP-02			Water + Sediment	2 SED	X	X	X	X	X	X	X		water in 9
													carboys

Analysis Requested

Comments/Special Instructions:
SHIPMENT INCLUDES:
4 - 5gal. BUCKETS (SOIL)
10 - COOLERS (SOIL)
9 - COOLERS (BULK H_2O)
~~1 - Carboy (EMPTY)~~

	Relinquished by:	Received by:	Relinquished by:	Received by:
(Signature)	Tim Stone	[illegible]		Bob Congleton
Printed Name:	TIM STONE	ANT WYUK		BOB CONGLETON
Company:	ANCHOR ENV.	SENVOY		ARI
Date & Time:	7/21/06 - 1200	7/21/06 - 1200		7/21/06 1635

0001

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Cooler Receipt Form

ANALYTICAL RESOURCES INCORPORATED

RI Client: _____ Project Name: _____

OC NO.: _____ Delivered By: COURIER

racking NO.: _____ Date: _____

RI Job No.: _____ Lims NO.: _____

reliminary Examination Phase: 9 COOLERS W/CARBOYS; 26°– 28° each

1. Were intact, properly signed and dated custody seals attached To the outside of the cooler? ..... YES NO
2. Were custody papers included with the cooler ..... YES NO
3. Were custody papers properly filled out (ink, signed etc.)? ..... YES NO
4. Complete custody forms and attach all shipping documents ..... OK NA

ooler Accepted BY: [illegible] Date: 7/21/06 Time: 1635

og-IN Phase: 4 BUCKETS: AMBIENT

5. Was a temperature blank include in the cooler? ..... YES (NO)
6. Record Cooler Temperature 1.5, 3.5, 2, 1.5, 5, 3, 1.6, 2, 2, 1.5 °C — 10 COOLERS 50 IL
7. What kind of packing material was used? ..... ICE
8. Was sufficient ice used (if appropriate)? ..... (YES) NO
9. Were all bottles sealed in separate plastic bags? ..... YES (NO)
10. Did all bottles arrive in good condition (unbroken)? ..... YES NO
11. Were all bottle labels complete and legible? ..... YES NO
12. Did all bottle labels and tags agree with custody papers? ..... YES NO
13. Were all bottles used correct for the requested analyses? ..... YES NO
14. Do any of the analyses (bottles) require preservative? (If so, Preservation checklist must be attached) ..... YES NO
15. Were all VOA vials free of air bubbles? ..... YES NO
16. Was sufficient amount of sample sent in each bottle? ..... YES NO
17. Notify Project Manager of any discrepancies or concerns ..... (OK) NA

oler Opened By: [illegible] Date: 7/21/06 Time 1635

plain any discrepancies or negative responses:

~~A~~ – CARBOY COOLERS IN CONVENTIONAL WALK-IN.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Client: Anchor Environmental	Project No.: JQ30
Client Project: T4 Early Action	

Case Narrative

1. The samples were submitted for grain size analysis according to ASTM methodology, Atterberg limits, specific gravity and column settling.
2. The grain size analysis was run according to ASTM D422, with the dry preparation according to ASTM D421. At the client's request, a #140 sieve was inserted into the sieve stack. Because this is non-standard, this data does not show in our normal plots or tabulation of the data, but is in the electronic data deliverable.
3. The Atterberg limits were run according to ASTM D4318. One sample was non-plastic. A plot of the data is provided.
4. The specific gravity was run on each sample three times, once on the whole sample, once on the fraction retained on the #200 sieve and once on the material passing the #200 sieve. The material passing the #200 sieve was washed through the sieve and air dried.
5. The column setting test was run according to Corps of Engineers guidance with an initial sediment concentration of 262.8 g/L. Because the sample was so sandy, much of this settled out in the first minute or so and the initial measured concentration was only 30.9 g/L. No interface was formed and so all of the ports were sampled at each sampling time (1, 2, 4, 6, 8, 12, 24, 48, 96, 174, 240 hours). This many samplings lead to a rapid drop in the water height in the column. Besides the TSS, each sample was tested for turbidity also. The turbidity data is provided in a table and plot.
6. There were no other noted anomalies in the methods or samples on this project.

Approved by: Harold Bauer Date: 8/21/06
Title: Geotechnical Division Manager

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

GEOTECHNICAL ANALYSIS DATA SHEET
Specific Gravity by Method ASTM D854

ANALYTICAL RESOURCES INCORPORATED

Data Release Authorized:
Reported: 08/23/06
Date Received: 07/21/06

QC Report No: JQ30-Anchor Environmental
Project: T4 EARLY ACTION
050332-01

Client/ ARI ID	Date Sampled	Matrix	Analysis Date	Result
T4-COMP-01 JQ30A 06-12857	07/20/06	Sediment	08/16/06 12:00	2.70
T4-COMP-02 JQ30B 06-12858	07/20/06	Sediment	08/16/06 12:00	2.64
T4-COMP-01 (< 0.074 mm) JQ30C 06-13115	07/20/06	Sediment	08/16/06 12:00	2.62
T4-COMP-01 (> 0.074 mm) JQ30D 06-13116	07/20/06	Sediment	08/16/06 12:00	2.69
T4-COMP-02 (< 0.074 mm) JQ30E 06-13117	07/20/06	Sediment	08/16/06 12:00	2.63
T4-COMP-02 (> 0.074 mm) JQ30F 06-13118	07/20/06	Sediment	08/16/06 12:00	2.62

Reported in Std Units

GEOTECHNICAL ANALYSIS DATA SHEET
Moisture Content by Method ASTM D2216

ANALYTICAL RESOURCES INCORPORATED

Data Release Authorized:
Reported: 08/23/06
Date Received: 07/21/06

QC Report No: JQ30-Anchor Environmental
Project: T4 EARLY ACTION
050332-01

Client/ ARI ID	Date Sampled	Matrix	Analysis Date	Result
T4-COMP-01 JQ30A 06-12857	07/20/06	Sediment	08/16/06 12:00	60.57
T4-COMP-02 JQ30B 06-12858	07/20/06	Sediment	08/16/06 12:00	71.60

Reported in Percent

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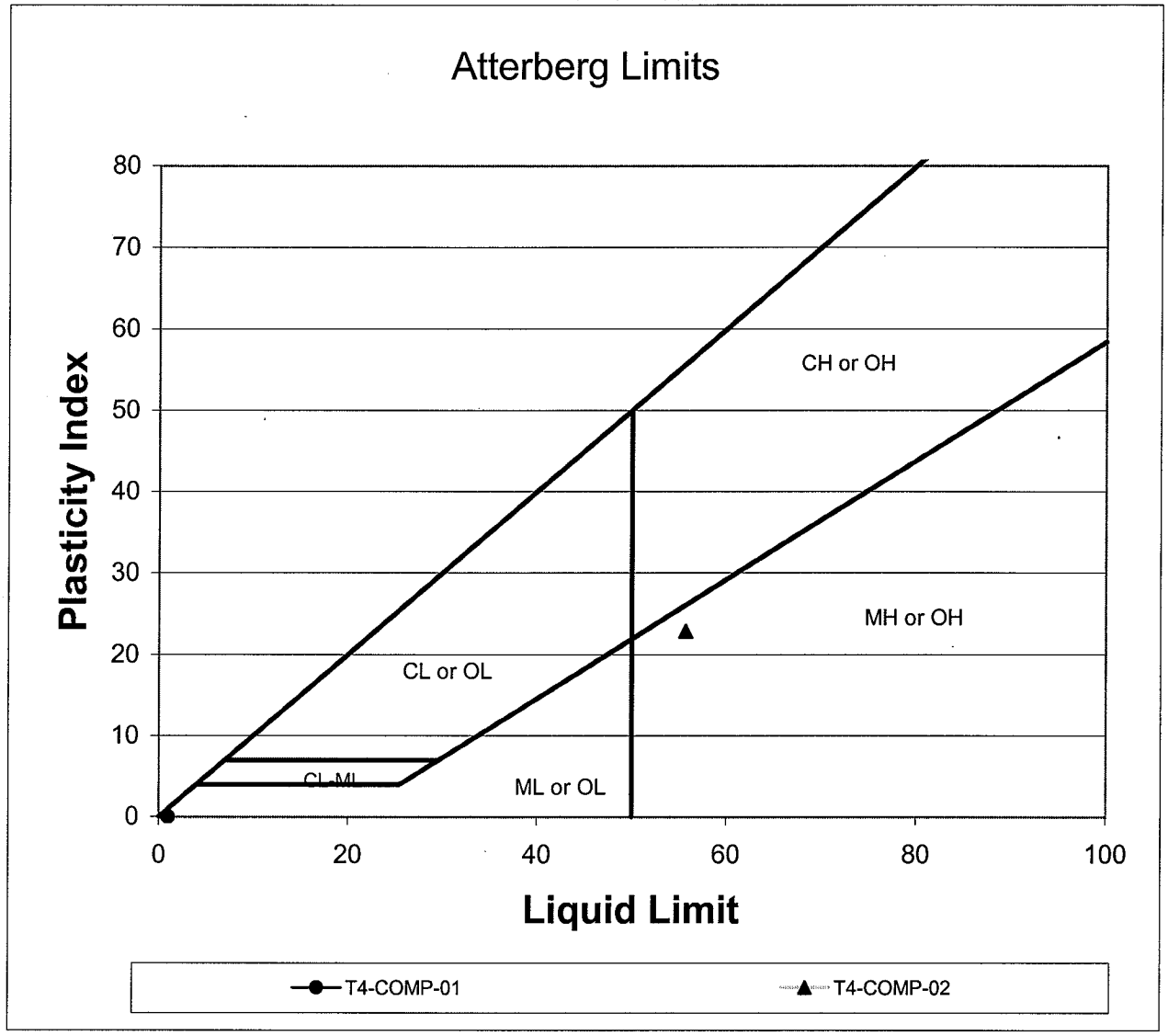
Anchor Environmental
T4 EARLY ACTION 050332-01



Sample Number	Depth	Plasticity Index	Liquid Limit	Plastic Limit	Classification
T4-COMP-01	NA	NA	NA	NA	Non-Plastic
T4-COMP-02	NA	22.8	55.7	32.9	OH

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Anchor Environmental
T4 EARLY ACTION 050332-01

Percent Finer (Passing) Than the Indicated Size

Sieve Size (microns)	2"	1"	3/4"	1/2"	3/8"	#4 (4750)	#10 (2000)	#20 (850)	#40 (425)	#60 (250)	#100 (150)	#200 (75)	32	22	13	9	7	3.2	1.3
T4-COMP-01	100.0	100.0	100.0	98.9	98.7	97.8	97.0	94.8	75.8	45.8	35.8	30.5	27.2	22.9	19.2	16.1	13.0	9.3	6.2
T4-COMP-02	100.0	100.0	100.0	100.0	100.0	99.9	99.8	99.4	92.6	77.8	72.8	66.6	54.7	48.9	39.5	33.1	27.3	19.4	13.7

Testing performed according to ASTM D421/D422

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Anchor Environmental
T4 EARLY ACTION 050332-01

Percent Retained in Each Size Fraction

Description	% Gravel	% Coarse Sand	% Medium Sand	% Fine Sand	% Very Coarse Silt	% Coarse Silt	% Medium Silt	% Fine Silt	% Fine Silt	% Very Fine Silt	% Clay
Particle Size (microns)	> 4750	4750-2000	2000-425	425-75	75-32	32-22	22-13	13-9	9-7	7-3.2	<3.2
T4-COMP-01	2.2	0.8	21.2	45.2	3.4	4.3	3.7	3.1	3.1	3.7	9.3
T4-COMP-02	0.1	0.1	7.2	26.0	12.0	5.8	9.3	6.5	5.8	7.9	19.4

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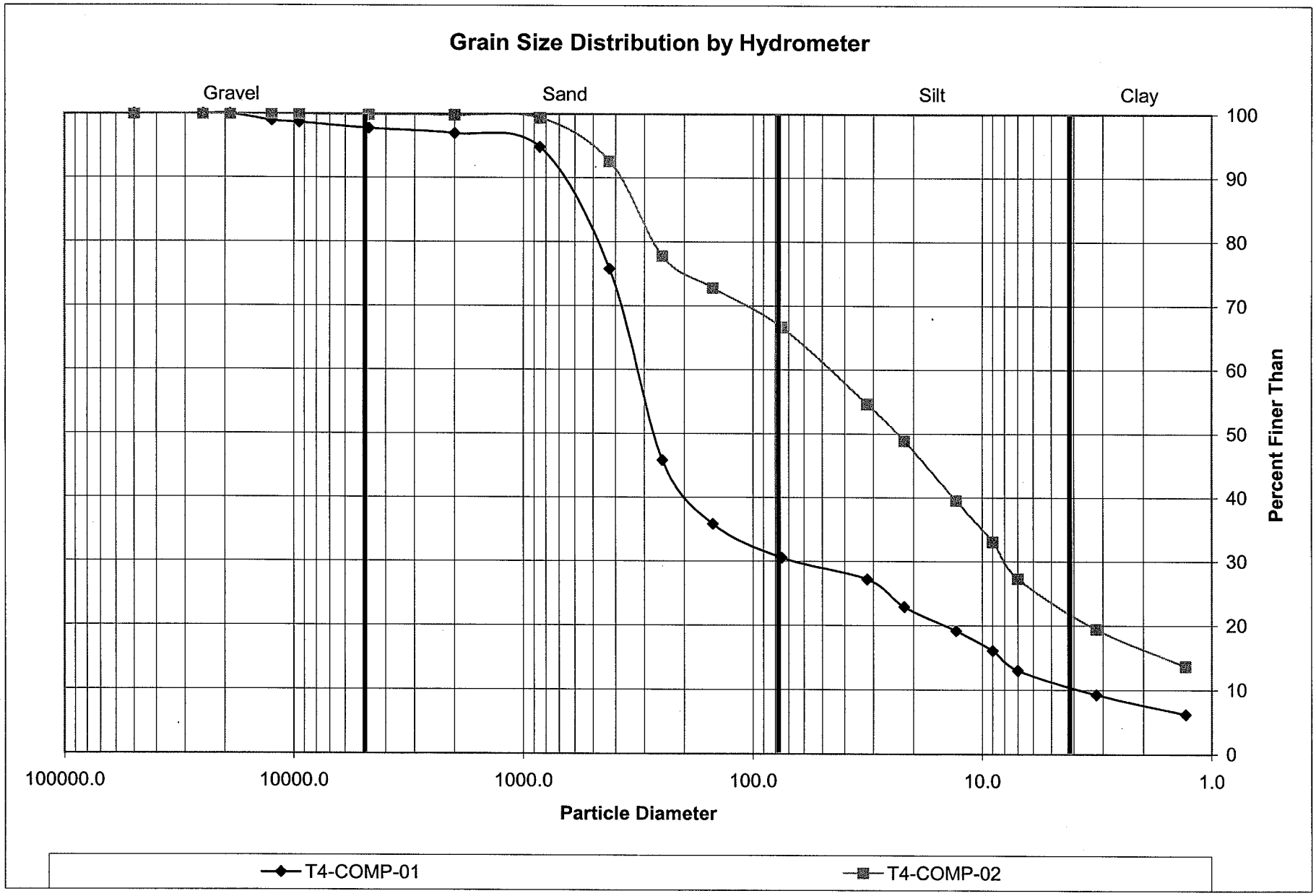

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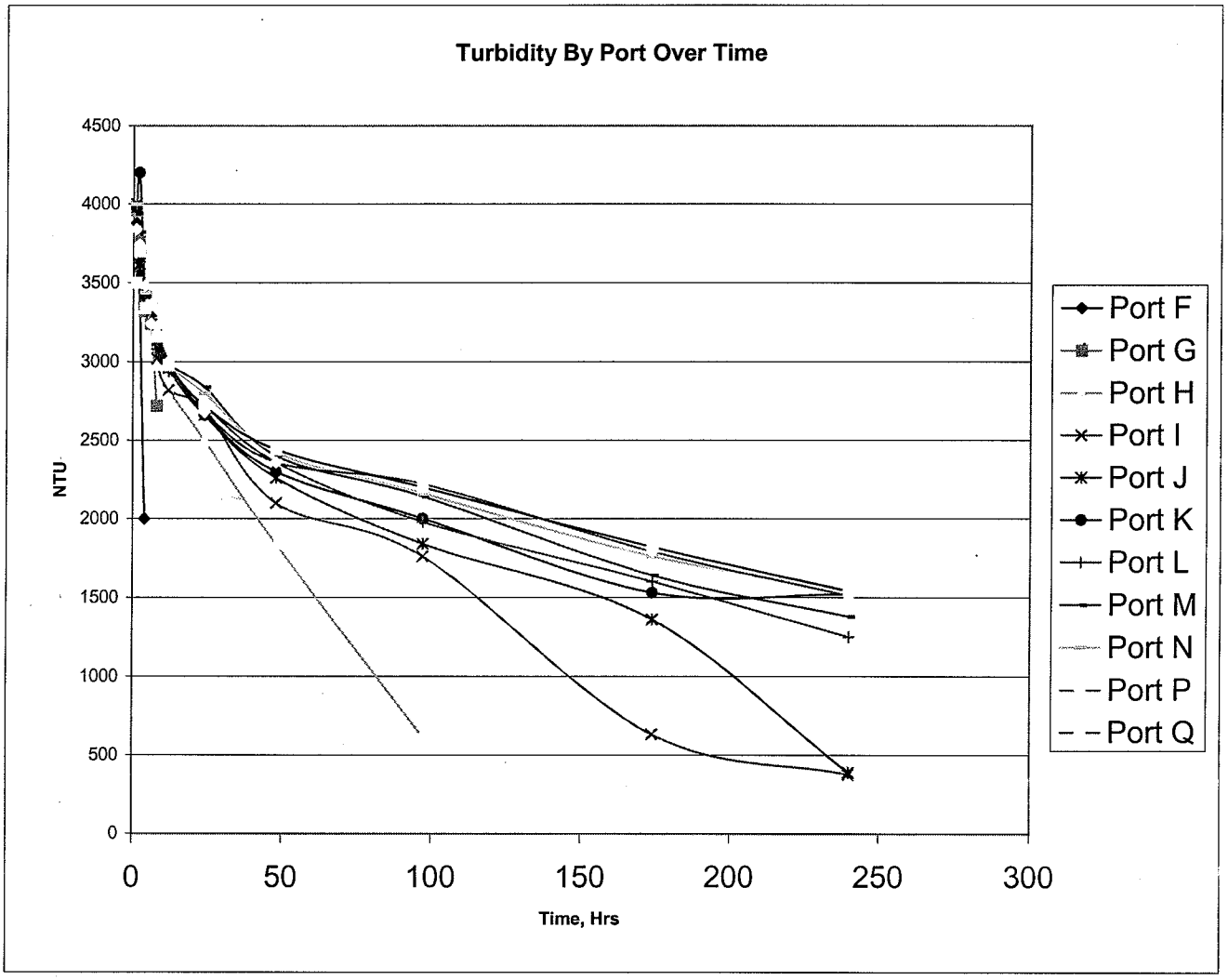
Anchor Environmental
T4 Early Action 050332-01
Comp 1



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Column Settling Test

Sample ID: Comp 1

Turbidity Over Time and Depth

	Depth from Top of Settling Column (ft)										
Time, hrs	0.63	1.13	1.63	2.13	2.63	3.13	3.63	4.13	4.63	5.13	5.63
1	3880	3960	4000	3980	4000	3980	4000	3940	4000	3840	3500
2	3500	3760	3720	3600	3620	4200	3700	3820	3700	3740	3700
4	2000	3320	3380	3400	3380	3420	3440	3420	3440	3480	3340
6		3240	3360	3360	3320	3360	3360	3260	3360	3240	3360
8		2720	2980	3020	3140	3180	3080	3080	3160	3220	3160
12			2820	2820	2960	2960	2940	2980	2980	3000	2980
24			2500	2700	2660	2660	2720	2840	2800	2680	2720
48			1840	2100	2260	2300	2360	2400	2420	2360	2440
97			620	1760	1840	2000	1980	2140	2160	2220	2200
174				631	1360	1530	1600	1640	1760	1790	1820
240				375	390	1520	1250	1380	1550	1510	1540

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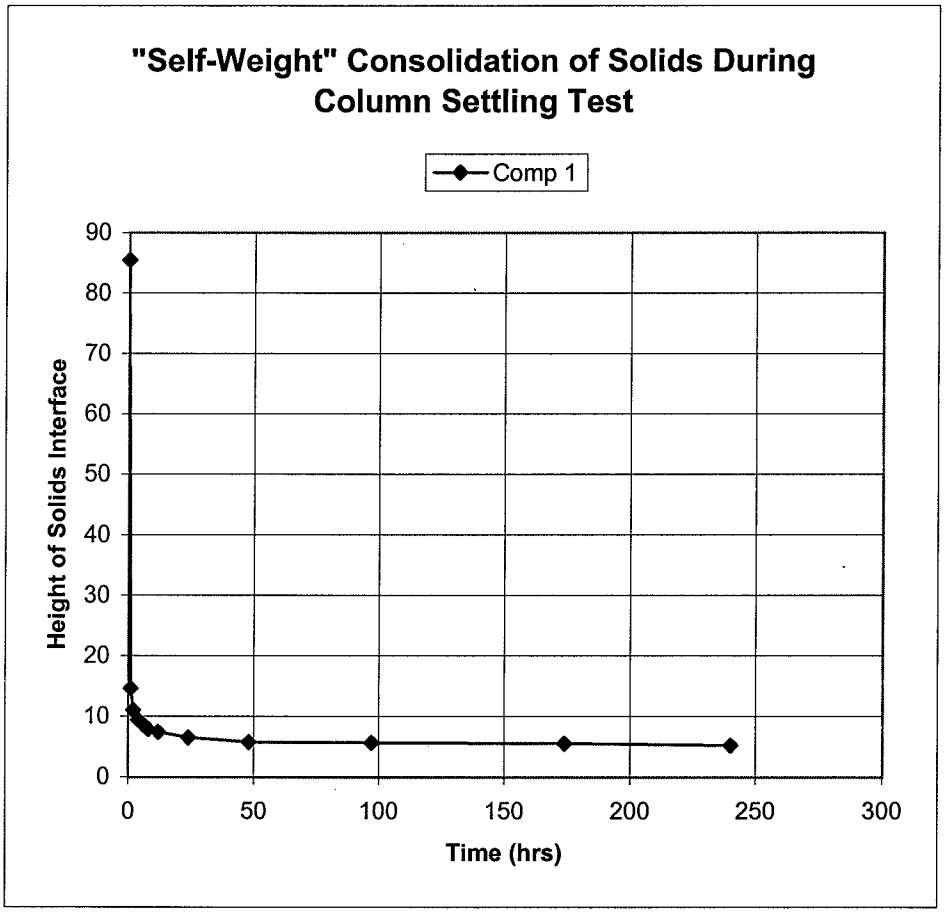
Anchor Environmental
T4 Early Action 050332-01



This plot shows the height of the solids interface above the bottom of the column over time, in hours.

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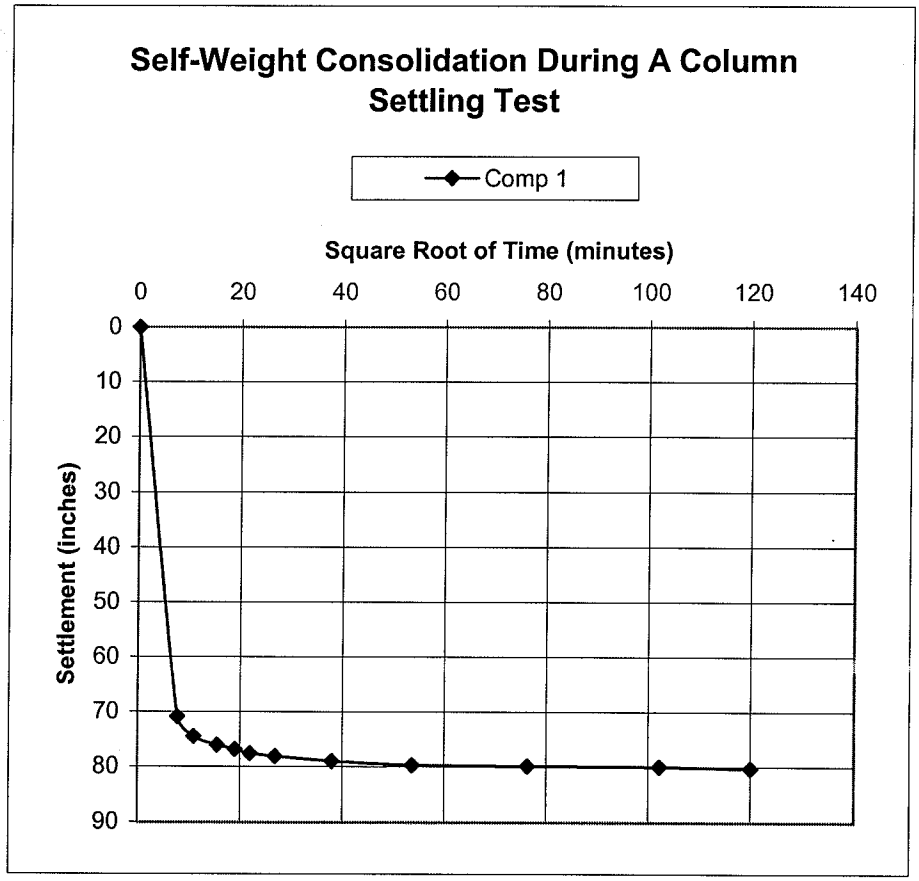
T4 Early Action 050332-01



This plot shows the settlement in inches versus the square root of time in minutes. The upper portion of the plot shows zone settling of the slurry. The lower portion of the plot shows the start of compression settling.

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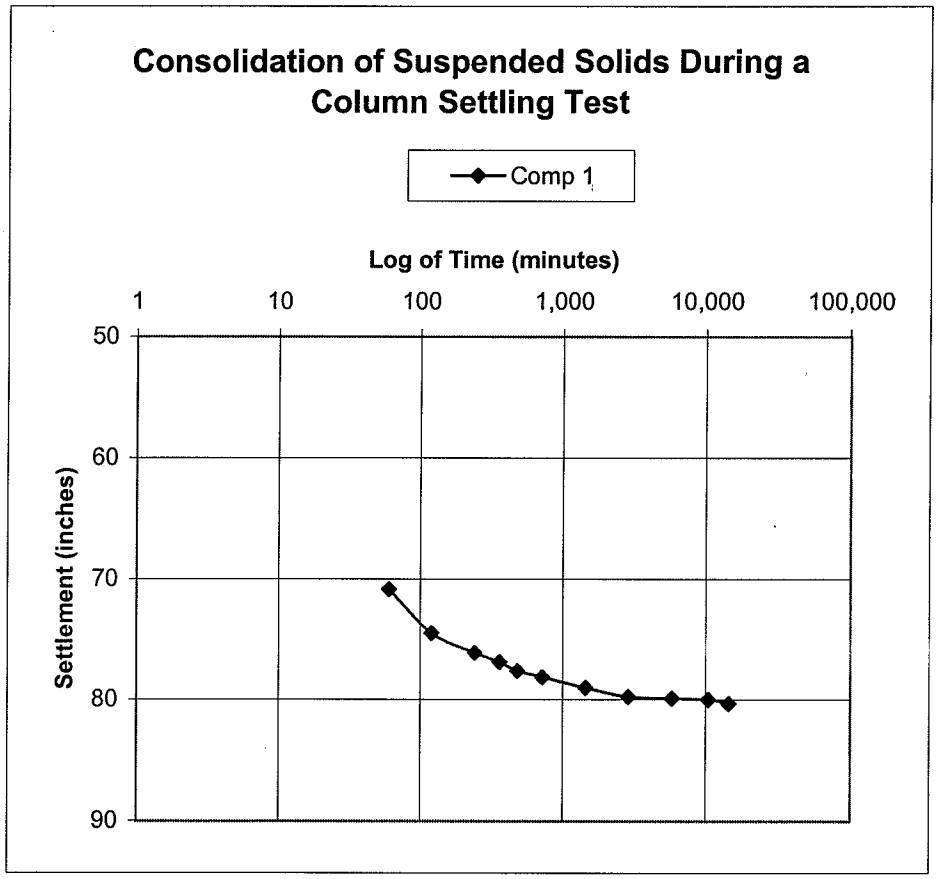
T4 Early Action 050332-01



This plot shows the settlement of the suspended solids versus the log of time. The compression settling portion of the curve is distinctly different from the zone settling portion.

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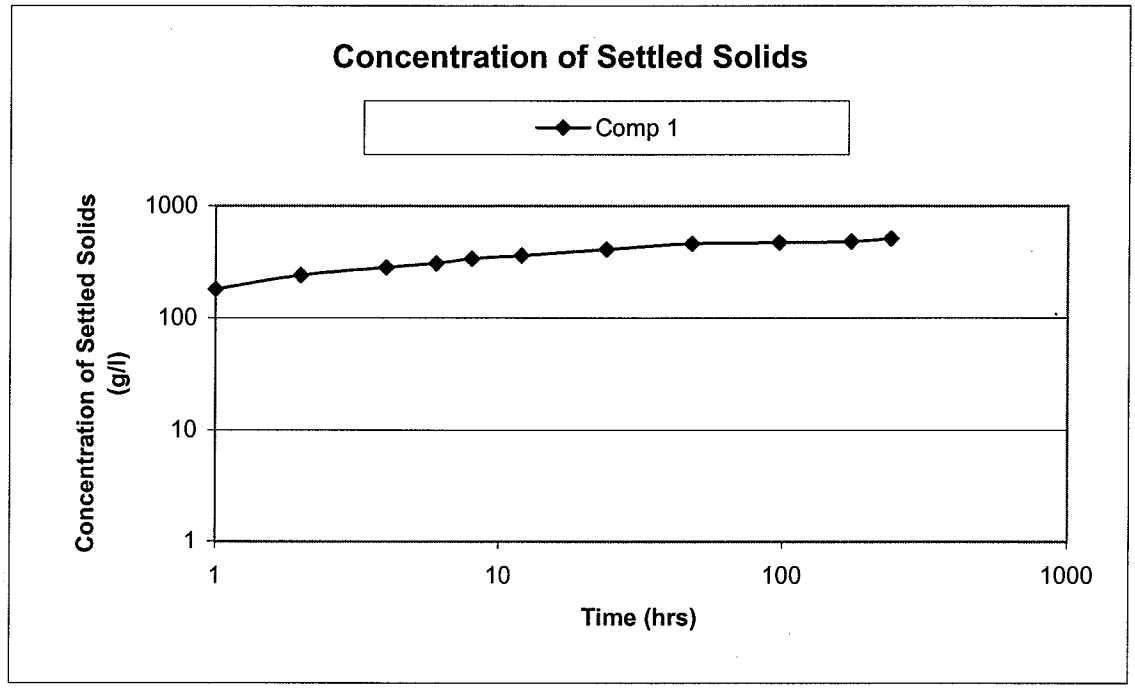
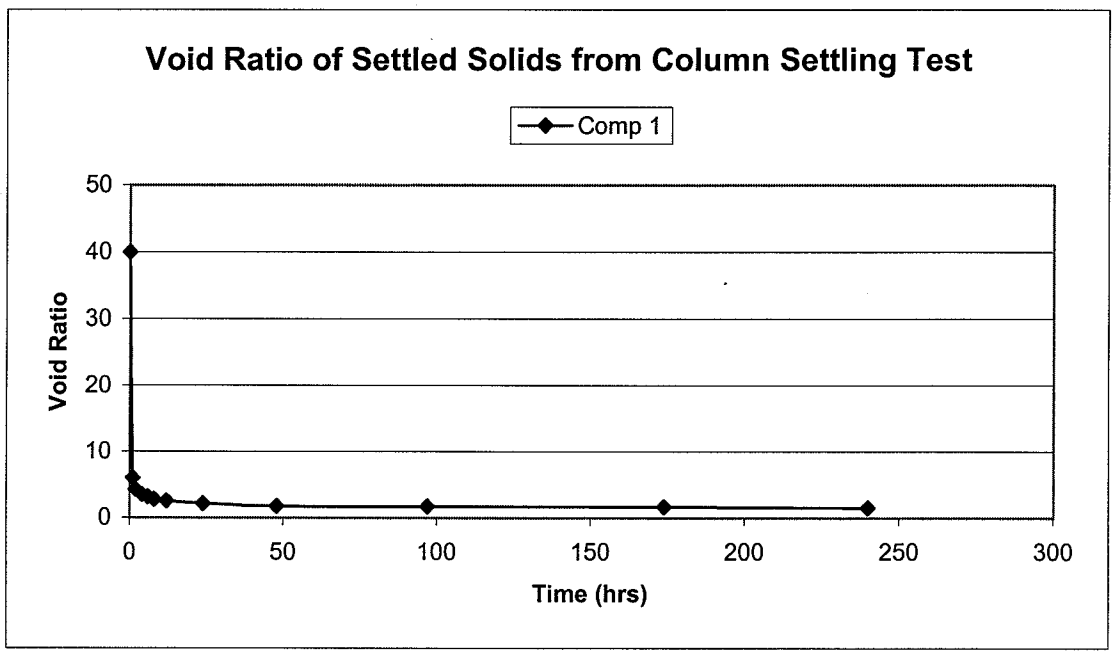
T4 Early Action 050332-01





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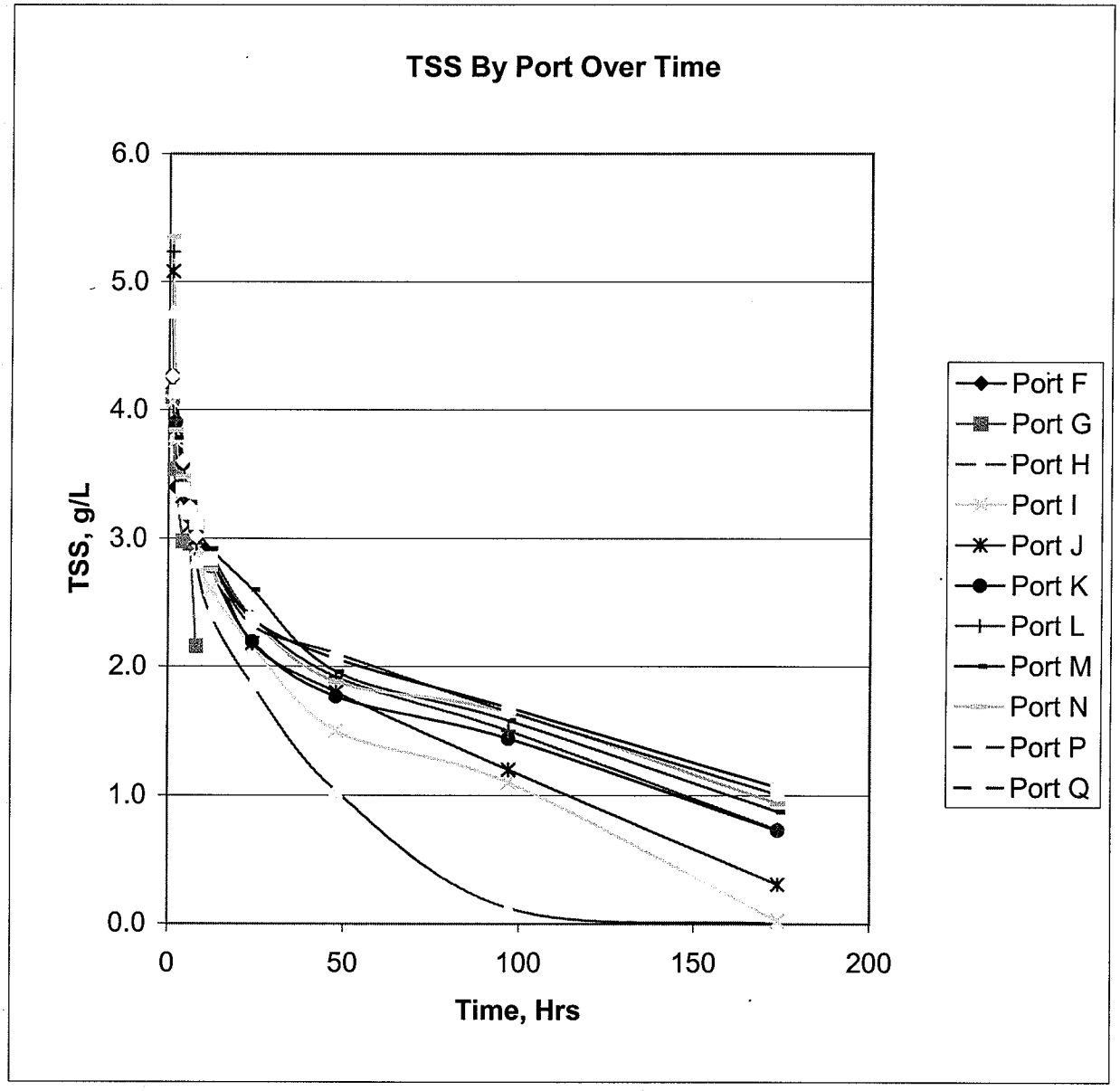
Anchor Environmental
T4 Early Action 050332-01
Comp 1



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Column Settling Test

Sample ID: Comp 1

Initial mix:	
Water volume, liters:	85
Sediment mass, grams, dry weight basis:	22,335.3
Initial mix ratio, g/L:	262.8
Initial measured TSS, in column:	30.9

Sediment Moisture Content, % of dry weight: 60.6

Percent of Initial TSS Concentration over Time

	Depth from Top of Settling Column (ft)										
Time, hrs	0.63	1.13	1.63	2.13	2.63	3.13	3.63	4.13.	4.63	5.13	5.63
1	13.5	13.3	15.4	13.1	16.4	13.8	16.9	13.5	17.3	13.8	
2	11.0	11.5	12.3	12.2	12.5	12.6	12.7	12.2	12.4	13.4	13.4
4		9.6	10.5	10.9	10.8	11.6	10.8	11.1	11.3	11.6	10.9
6		9.6	10.4	10.3	10.0	10.5	10.4	10.6	10.4	10.5	10.4
8		7.0	9.1	9.4	9.7	10.0	9.6	10.0	10.2	9.8	10.1
12			7.8	8.4	9.3	9.0	9.3	9.4	8.9	9.2	9.2
24			6.0	7.0	7.1	7.1	7.7	8.4	7.6	7.5	7.7
48			3.4	4.9	5.8	5.7	6.2	6.3	6.1	6.8	6.7
97			0.4	3.6	3.9	4.7	4.9	5.1	5.3	5.3	5.4
174				0.1	1.0	2.4	2.4	2.8	3.0	3.3	3.4
240				0.2	0.2	2.3	1.8	2.4	2.7	2.8	3.0

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Anchor Environmental
T4 Early Action 050332-01

Comp 1

Sample Extraction Time (hrs)	Depth of Extraction (ft	Suspended Solids (g/L)	Fraction of Initial SS (%)
1	0.6	4.16	13.5
1	1.1	4.10	13.3
1	1.6	4.76	15.4
1	2.1	4.06	13.1
1	2.6	5.08	16.4
1	3.1	4.26	13.8
1	3.6	5.24	16.9
1	4.1	4.17	13.5
1	4.6	5.35	17.3
1	5.1	4.26	13.8
1	5.6	NA	NA
2	0.6	3.40	11.0
2	1.1	3.54	11.5
2	1.6	3.80	12.3
2	2.1	3.76	12.2
2	2.6	3.86	12.5
2	3.1	3.90	12.6
2	3.6	3.92	12.7
2	4.1	3.78	12.2
2	4.6	3.84	12.4
2	5.1	4.14	13.4
2	5.6	4.14	13.4
4	0.6	0.98	3.2
4	1.1	2.98	9.6
4	1.6	3.24	10.5
4	2.1	3.36	10.9
4	2.6	3.33	10.8
4	3.1	3.58	11.6
4	3.6	3.34	10.8
4	4.1	3.42	11.1
4	4.6	3.48	11.3
4	5.1	3.60	11.6
4	5.6	3.38	10.9
6	0.6	NA	NA
6	1.1	2.96	9.6
6	1.6	3.22	10.4
6	2.1	3.18	10.3
6	2.6	3.10	10.0
6	3.1	3.24	10.5
6	3.6	3.22	10.4
6	4.1	3.28	10.6
6	4.6	3.21	10.4
6	5.1	3.24	10.5
6	5.6	3.20	10.4

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Anchor Environmental
T4 Early Action 050332-01

Comp 1

Sample Extraction Time (hrs)	Depth of Extraction (ft	Suspended Solids (g/L)	Fraction of Initial SS (%)
8	0.6	NA	NA
8	1.1	2.16	7.0
8	1.6	2.82	9.1
8	2.1	2.92	9.4
8	2.6	3.00	9.7
8	3.1	3.08	10.0
8	3.6	2.96	9.6
8	4.1	3.08	10.0
8	4.6	3.14	10.2
8	5.1	3.02	9.8
8	5.6	3.12	10.1
12	0.6	NA	NA
12	1.1	NA	NA
12	1.6	2.41	7.8
12	2.1	2.60	8.4
12	2.6	2.88	9.3
12	3.1	2.78	9.0
12	3.6	2.88	9.3
12	4.1	2.92	9.4
12	4.6	2.76	8.9
12	5.1	2.84	9.2
12	5.6	2.84	9.2
24	0.6	NA	NA
24	1.1	NA	NA
24	1.6	1.86	6.0
24	2.1	2.16	7.0
24	2.6	2.18	7.1
24	3.1	2.19	7.1
24	3.6	2.38	7.7
24	4.1	2.60	8.4
24	4.6	2.36	7.6
24	5.1	2.32	7.5
24	5.6	2.37	7.7
48	0.6	NA	NA
48	1.1	NA	NA
48	1.6	1.04	3.4
48	2.1	1.50	4.9
48	2.6	1.80	5.8
48	3.1	1.76	5.7
48	3.6	1.92	6.2
48	4.1	1.96	6.3
48	4.6	1.88	6.1
48	5.1	2.10	6.8
48	5.6	2.06	6.7

ANALYTICAL RESOURCES INCORPORATED

Anchor Environmental
T4 Early Action 050332-01

Comp 1

Sample Extraction Time (hrs)	Depth of Extraction (ft	Suspended Solids (g/L)	Fraction of Initial SS (%)
97	0.6	NA	NA
97	1.1	NA	NA
97	1.6	0.12	0.4
97	2.1	1.10	3.6
97	2.6	1.20	3.9
97	3.1	1.44	4.7
97	3.6	1.50	4.9
97	4.1	1.58	5.1
97	4.6	1.64	5.3
97	5.1	1.65	5.3
97	5.6	1.68	5.4
174	0.6	NA	NA
174	1.1	NA	NA
174	1.6	NA	NA
174	2.1	0.02	0.1
174	2.6	0.31	1.0
174	3.1	0.73	2.4
174	3.6	0.74	2.4
174	4.1	0.88	2.8
174	4.6	0.94	3.0
174	5.1	1.01	3.3
174	5.6	1.06	3.4
240	0.6	NA	NA
240	1.1	NA	NA
240	1.6	NA	NA
240	2.1	0.07	0.2
240	2.6	0.05	0.2
240	3.1	0.70	2.3
240	3.6	0.56	1.8
240	4.1	0.75	2.4
240	4.6	0.84	2.7
240	5.1	0.86	2.8
240	5.6	0.93	3.0

ANALYTICAL RESOURCES INCORPORATED

Anchor Environmental
T4 Early Action 050332-01
Comp 1

Percentage of Initial Concentration and Suspended Solids vs. Time, Assumed Depth of Influence of 1 ft.

Sample Extraction Time	Removal Percentage	Remaining Percentage	Suspended Solids (g/L)
1	86.74	13.26	4.10
2	88.55	11.45	3.54
4	90.36	9.64	2.98
6	90.42	9.58	2.96
8	93.01	6.99	2.16
12	NA	NA	NA
24	NA	NA	NA
48	NA	NA	NA
97	NA	NA	NA
174	NA	NA	NA
240	NA	NA	NA

Percentage of Initial Concentration and Suspended Solids vs. Time, Assumed Depth of Influence of 2 ft.

Sample Extraction Time	Removal Percentage	Remaining Percentage	Suspended Solids (g/L)
1	86.87	13.13	4.06
2	87.84	12.16	3.76
4	89.13	10.87	3.36
6	89.71	10.29	3.18
8	90.56	9.44	2.92
12	91.59	8.41	2.60
24	93.01	6.99	2.16
48	95.15	4.85	1.50
97	96.44	3.56	1.10
174	99.93	0.07	0.02
240	99.78	0.22	0.07

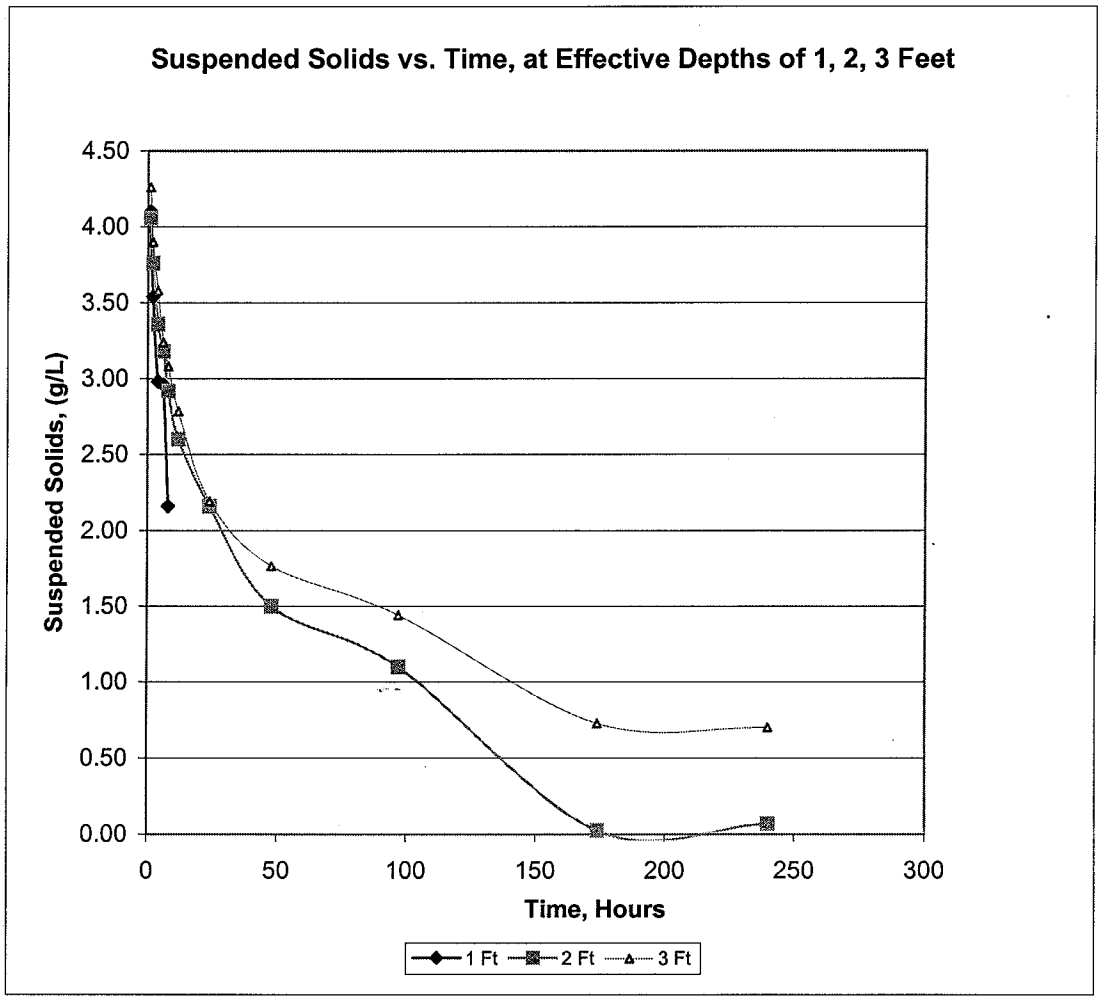
Percentage of Initial Concentration and Suspended Solids vs. Time, Assumed Depth of Influence of 3 ft.

Sample Extraction Time	Removal Percentage	Remaining Percentage	Suspended Solids (g/L)
1	86.22	13.78	4.26
2	87.39	12.61	3.90
4	88.42	11.58	3.58
6	89.52	10.48	3.24
8	90.04	9.96	3.08
12	90.99	9.01	2.78
24	92.91	7.09	2.19
48	94.29	5.71	1.76
97	95.34	4.66	1.44
174	97.65	2.35	0.73
240	97.74	2.26	0.70

JQ30

ANALYTICAL RESOURCES INCORPORATED

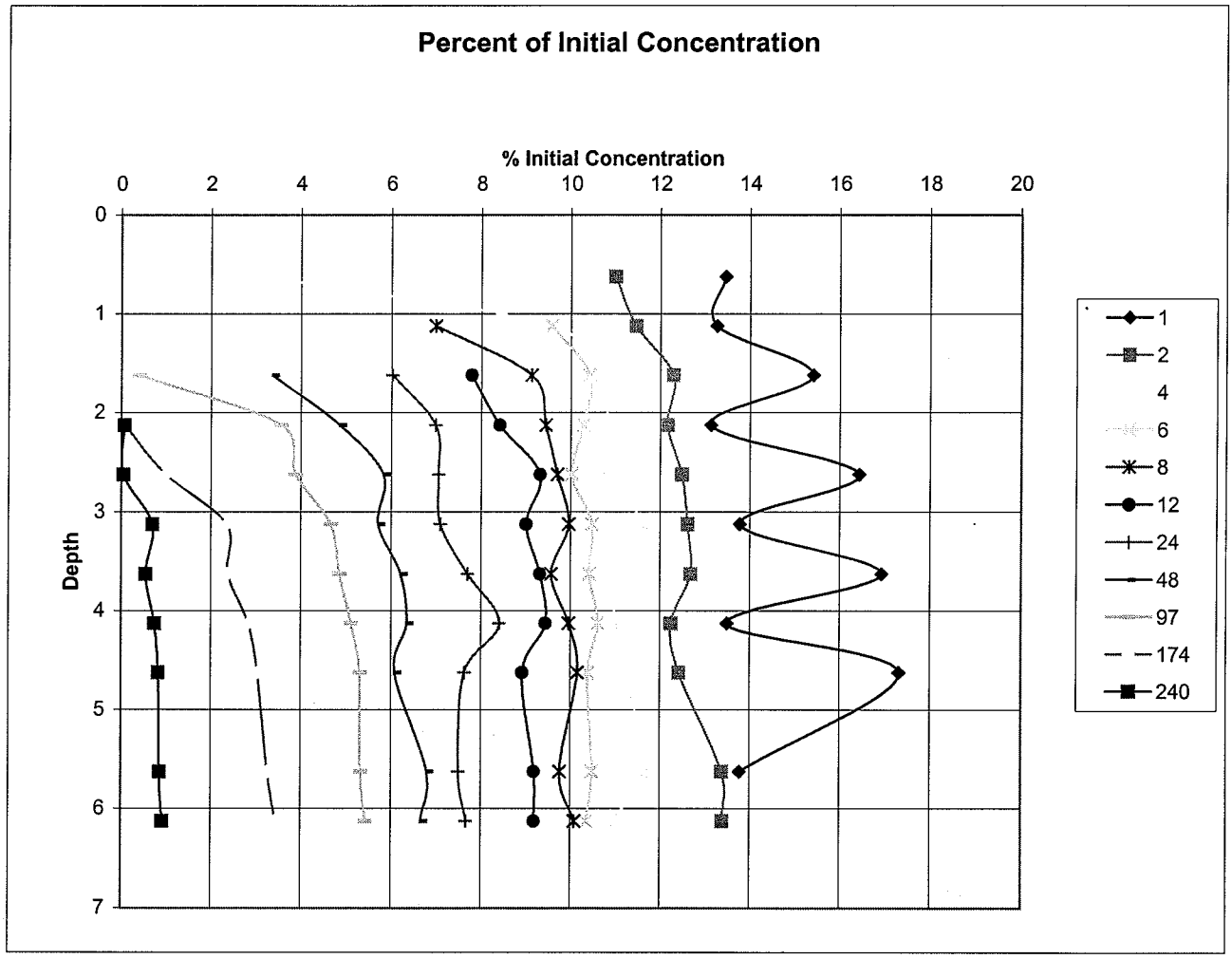
Anchor Environmental
T4 Early Action 050332-01
Comp 1



JQ30

ANALYTICAL RESOURCES INCORPORATED

Anchor Environmental
T4 Early Action 050332-01
Comp 1



JQ30

ANALYTICAL RESOURCES INCORPORATED

Analytical Resources, Incorporated

Settling Column

Project	JQ30		Sample No.	A
Initial Height of Slurry =	85 1/2		Initial TSS =	

Date	Time	Elapsed Time (hrs)	Height of Interface (in)	Height of Sand (in)	Ports Sampled	Notes
7/31/06	8:40	—	—	—	E, G, I, K, M, P	HB, tm, BB
	9:40	1	14.625		E → P	HB, TM
	10:40	2	11.0		F → P	HB
	12:40	4	9.375		F → P	HB
	14:40	6	8.625		G → Q	tm
	16:40	8	7.875		G → Q	HB
	20:40	12	7.375		G → Q	HB
8/1/06	8:40	24	6.5		H → Q	tm
8/2/06	8:40	48	5.75		H → Q	HB
8/4/06	9:40	97	5.625		H → Q	HB
8/7/06	14:40	174	5.5		I H → Q	TM
8/10/06	8:40	240	5.2		I → Q	tm

7 1/2" down to Port F

20,476.5

45.14 lbs
1.76
46.90

51.07
-1.76
49.31

0024

Total Suspended Solids

ANALYTICAL RESOURCES INCORPORATED

Project No. JQ30
Date 7/31/06

Sample ID	Tare ID	Volume Used	Wt of Filter	Wt of Filter and Solids	
EO	P8863	5	0.1078	0.1999	
GO	P8862	~~5~~ 5.1	0.1075	0.2641	BB
IO	P8861	5	0.1060	0.2652	
KO	P8860	4.9	0.1078	0.2769	
MO	P8859	5	0.1071	0.2778	
PO	P8858	5	0.1068	0.2862	
F1	P8857	5	0.1077	0.1286	
G1	P8856	5	0.1071	0.1276	
H1	P8855	5.1	0.1060	0.1303	
I1	P8854	5.1	0.1073	0.1280	
J1	P8853	5	0.1065	0.1319	
K1	P8852	5	0.1073	0.1286	
L1	P8851	5.1	0.1065	0.1332	
M1	P8850	5.2	0.1073	0.1290	
N1	P8849	5.1	0.1057	0.1330	
P1	P8848	5	0.1056	0.1269	
Q1	P8847	5	0.1082	0.6894	
F2	P8846	5	0.1083	0.1253	
G2	P8845	5	0.1069	0.1246	
H2	P8844	5	0.1079	0.1269	
I2	P8843	5	0.1069	0.1257	
J2	P8842	5	0.1082	0.1275	
K2	P8841	5	0.1071	0.1266	
L2	P8840	5	0.1075	0.1271	
M2	P8839	5.1	0.1074	0.1267	
N2	P8838	5	0.1076	0.1268	
P2	P8837	5.1	0.1075	0.1286	
Q2	P8836	5	0.1070	0.1277	
F4	P8834	5.3	0.1070	0.1122	
G4	P8833	5	0.1083	0.1232	
H4	P8832	5	0.1072	0.1234	
I4	P8831	5	0.1065	0.1233	
J4	P8830	5.2	0.1077	0.1250	
L4	P8829	5	0.1086	0.1253	
M4	P8828	5	0.1067	0.1238	
N4	P8827	5	0.1072	0.1246	HB
P4	P8826	5	0.1075	0.1255	
Q4	P8825	5	0.1063	0.1232	
G6	P8824	5.1	0.1068	0.1219	
H6	P8823	5	0.1060	0.1221	
I6	P8822	5	0.1057	0.1216	
J6	P8821	5	0.1058	0.1207	
K6	P8820	5	0.1068	0.1230	
L6	P8819	5	0.1069	0.1230	

Analytical Resources, Inc.

Total Suspended Solids

Project No. JQ30
Date 7/31/06

Page 2

Sample ID	Tare ID	Volume Used	Wt of Filter	Wt of Filter and Solids
M6	P8818	5	0.1065	0.1229
N6	P8817	5.2	0.1065	0.1232
P6	P8816	5	0.1065	0.1227
Q6	P8815	5	0.1072	0.1232
G8	P8814	5	0.1052	0.1160
H8	P0266	5	0.1052	0.1193
I8	P0265	5	0.1067	0.1213
J8	P0264	5	0.1084	0.1234
K8	P0263	5	0.1060	0.1214
L8	P0262	5	0.1033	0.1181
M8	P0261	5	0.1064	0.1218
N8	P0260	5	0.1074	0.1231
P8	P0259	5	0.1073	0.1224
Q8	P0258	5	0.1051	0.1207
K4	P0257	5	0.1076	0.1255
H12	P0256	5.4	0.1055	0.1185
I12	P0255	5	0.1065	0.1195
J12	P0254	5	0.1054	0.1198
K12	P0253	5.1	0.1069	0.1211
L12	P0252	5	0.1057	0.1201
M12	P0251	5	0.1064	0.1210
N12	P8813	5	0.1067	0.1205
P12	P8812	5	0.1080	0.1222
Q12	P8811	5	0.1077	0.1219
H24	P8810	5	0.1067	0.1160
I24	P8809	5	0.1068	0.1176
J24	P8808	5	0.1083	0.1192
K24	P8807	5.2	0.1060	0.1174
L24	P8806	5	0.1066	0.1184
M24	P8805	5	0.1085	0.1215
N24	P8804	5	0.1075	0.1193
P24	P8803	5	0.1053	0.1169
Q24	P8802	5.1	0.1057	0.1178
H48	P8801	5.1	0.1076	0.1129
I48	P8800	5	0.1062	0.1137
J48	P8799	5	0.1069	0.1159
K48	P8798	5.1	0.1052	0.1142
L48	P8797	5	0.1080	0.1176
M48	P8796	5	0.1060	0.1158
N48	P8795	5	0.1069	0.1163
Q48	P8794	5	0.1073	0.1178
P48	P8793	5	0.1070	0.1173

Total Suspended Solids

ANALYTICAL RESOURCES INCORPORATED

Project No. JQ30
Date 8/4/06

Sample ID	Tare ID	Volume Used	Wt of Filter	Wt of Filter and Solids	
H96	P8791	~~5~~ 4.9	0.1082	.1088	BB
I96	P8790	5	0.1059	.1114	
J96	P8789	5	0.1077	.1137	
K96	P8788	5	0.1070	.1142	
L96	P8787	5	0.1078	.1153	
M96	P8786	5	0.1083	.1162	
N96	P8785	5	0.1068	.1150	
P96	P8784	5.1	0.1070	.1154	
Q96	P8783	5	0.1054	.1138	
I 174	P8782	35	0.1079	0.1087	
J 174	P8781	25	0.1068	0.1145	
K 174	P8780	25	0.1075	0.1257	
L 174	P8779	25	0.1074	0.1258	
M 174	P8778	25	0.1052	0.1271	
N 174	P8777	25	0.1080	0.1315	
P 174	P8776	25	0.1080	0.1322	
Q 174	P8775	25	0.1077	0.1343	
I 240	P8764	25	0.1079	0.1096	tm
J 240	P8765	25	0.1075	0.1087	
K 240	P8766	25	0.1071	0.1246	
L 240	P8767	20	0.1063	0.1174	
M 240	P8768	20	0.1089	0.1239	
N 240	P8769	20	0.1082	0.1249	
P 240	P8770	20	0.1077	0.1249	
Q 240	P8771	20	0.1075	0.1260	

PD 8/1/06

TURBIDITY BENCHSHEET

Instrument: HACH 18900

Method: EPA 180.1

DATE:	7/31/2006
ANALYST:	UW

Primary Calibration Data

Primary Date 6/20/2006

Cal Date OK

	MEASUREMENT RANGE		
Gelex Stds	**0-2**	**0-20**	**0-200**
Calibrated	1.38	18.2	155

Secondary Calibration Data

Gelex Obs	1.35	17.8	150
% Recovery	*97.8%*	*97.8%*	*96.8%*

Calibration OK

	Stray Light
measured	0.02
Correction	0.00

SAMPLE DATA

If measured NTU > 40 then sample must be diluted

Dilution factor(Df) calculated as: 1/(mL sample/total mL). Enter appropriate data for mL sample and mL DI in the dilution columns, otherwise, leave columns blank

no entries are to be made in shaded cells

Detection Limit set at 0.05 NTU

Reporting Units	
NTU	*Record to*
0.0 - 1.0	0.05
1 - 10	0.1
10 - 40	1
40 - 100	5
> 100	10

The Instrument Performance Check (IPC) should be the mid-range Gelex Standard

IPC = **18.2** *NTU*

SAMPLE ID	Dilution mL sample	mL DI	Df	Measured NTU	Corrected NTU	NOTES
Blank (LRB)			**1.0**	0.00	**< 0.05**	*OK!*
IPC			**1.0**	17.9	**17.90**	*98.4%*
JR12 A2			**1.0**	1.11	**1.11**	
JR12 A2 Dup			**1.0**	1.15	**1.15**	*RPD=3.54%*
Blank (LRB)			**1.0**	0.00	**< 0.05**	*OK!*
IPC			**1.0**	17.8	**17.80**	*97.8%*
E0	0.1	49.9	**500.0**	17.5	**8750.00**	
E0 Dup	0.1	49.9	**500.0**	17.8	**8900.00**	*RPD=1.7%*
G0	0.1	49.9	**500.0**	25	**12500.00**	
I0	0.05	49.95	**1000.0**	14.2	**14200.00**	
K0	0.05	49.95	**1000.0**	13.3	**13300.00**	
M0	0.05	49.95	**1000.0**	13.0	**13000.00**	
P0	0.05	49.95	**1000.0**	13.9	**13900.00**	
F1	0.25	49.75	**200.0**	19.4	**3880.00**	
Blank (LRB)			**1.0**	0.00	**< 0.05**	*OK!*
IPC			**1.0**	17.8	**17.80**	*97.8%*
G1	0.25	49.75	**200.0**	19.80	**3960.00**	
G1 Dup	0.25	49.75	**200.0**	19.70	**3940.00**	*RPD=0.51%*
H1	0.25	49.75	**200.0**	20	**4000.00**	
I1	0.25	49.75	**200.0**	19.9	**3980.00**	
J1	0.25	49.75	**200.0**	20	**4000.00**	
K1	0.25	49.75	**200.0**	19.9	**3980.00**	
L1	0.25	49.75	**200.0**	20	**4000.00**	
M1	0.25	49.75	**200.0**	19.7	**3940.00**	
N1	0.25	49.75	**200.0**	20	**4000.00**	
P1	0.25	49.75	**200.0**	19.2	**3840.00**	
Blank (LRB)			**1.0**	0.00	**< 0.05**	*OK!*
IPC			**1.0**	17.8	**17.80**	*97.8%*

Q1	0.25	49.75	**200.0**	17.5	**3500.00**	
F2	0.25	49.75	**200.0**	17.5	**3500.00**	
F2 Dup	0.25	49.75	**200.0**	17.8	**3560.00**	*RPD=1.7%*
G2	0.25	49.75	**200.0**	18.8	**3760.00**	
H2	0.25	49.75	**200.0**	18.6	**3720.00**	
I2	0.25	49.75	**200.0**	18.0	**3600.00**	
J2	0.25	49.75	**200.0**	18.1	**3620.00**	
K2	0.25	49.75	**200.0**	21	**4200.00**	
L2	0.25	49.75	**200.0**	18.5	**3700.00**	
M2	0.25	49.75	**200.0**	19.1	**3820.00**	
N2	0.25	49.75	**200.0**	18.5	**3700.00**	
P2	0.25	49.75	**200.0**	18.7	**3740.00**	
Blank (LRB)			**1.0**	0.00	**< 0.05**	*OK!*
IPC			**1.0**	17.8	**17.80**	*97.8%*
Q2	0.25	49.75	**200.0**	18.5	**3700.00**	
F4	0.25	49.75	**200.0**	10.0	**2000.00**	
F4 Dup	0.25	49.75	**200.0**	10.0	**2000.00**	*RPD=0%*
G4	0.25	49.75	**200.0**	16.6	**3320.00**	
H4	0.25	49.75	**200.0**	16.9	**3380.00**	
I4	0.25	49.75	**200.0**	17.0	**3400.00**	
J4	0.25	49.75	**200.0**	16.9	**3380.00**	
K4	0.25	49.75	**200.0**	17.1	**3420.00**	
L4	0.25	49.75	**200.0**	17.2	**3440.00**	
M4	0.25	49.75	**200.0**	17.1	**3420.00**	
Blank (LRB)			**1.0**	0.00	**< 0.05**	*OK!*
IPC			**1.0**	17.8	**17.80**	*97.8%*
N4	0.25	49.75	**200.0**	17.2	**3440.00**	
P4	0.25	49.75	**200.0**	17.4	**3480.00**	
Q4	0.25	49.75	**200.0**	16.7	**3340.00**	
G6	0.25	49.75	**200.0**	16.2	**3240.00**	
G6 Dup	0.25	49.75	**200.0**	16.0	**3200.00**	*RPD=1.24%*
H6	0.25	49.75	**200.0**	16.8	**3360.00**	
I6	0.25	49.75	**200.0**	16.8	**3360.00**	
J6	0.25	49.75	**200.0**	16.6	**3320.00**	
K6	0.25	49.75	**200.0**	16.8	**3360.00**	
L6	0.25	49.75	**200.0**	16.8	**3360.00**	
M6	0.25	49.75	**200.0**	16.3	**3260.00**	
N6	0.25	49.75	**200.0**	16.8	**3360.00**	
Blank (LRB)			**1.0**	0.00	**< 0.05**	*OK!*
IPC			**1.0**	17.8	**17.80**	*97.8%*

P6	0.25	49.75	**200.0**	16.2	**3240.00**	
Q6	0.25	49.75	**200.0**	16.8	**3360.00**	
G8	0.25	49.75	**200.0**	13.6	**2720.00**	
G8 Dup	0.25	49.75	**200.0**	13.8	**2760.00**	*RPD=1.46%*
H8	0.25	49.75	**200.0**	14.9	**2980.00**	
I8	0.25	49.75	**200.0**	15.1	**3020.00**	
J8	0.25	49.75	**200.0**	15.7	**3140.00**	
K8	0.25	49.75	**200.0**	15.9	**3180.00**	
L8	0.25	49.75	**200.0**	15.4	**3080.00**	
M8	0.25	49.75	**200.0**	15.4	**3080.00**	
Blank (LRB)			**1.0**	0.00	**< 0.05**	*OK!*
IPC			**1.0**	17.8	**17.80**	*97.8%*
N8	0.25	49.75	**200.0**	15.8	**3160.00**	
P8	0.25	49.75	**200.0**	16.1	**3220.00**	
Q8	0.25	49.75	**200.0**	15.8	**3160.00**	
Blank (LRB)			**1.0**	0.00	**< 0.05**	*OK!*
IPC			**1.0**	17.8	**17.80**	*97.8%*

TURBIDITY BENCHSHEET

Instrument: HACH 18900

Method: EPA 180.1

DATE:	8/1/2006
ANALYST:	UW

Primary Calibration Data

Primary Date 6/20/2006

Cal Date OK

	MEASUREMENT RANGE		
Gelex Stds	**0-2**	**0-20**	**0-200**
Calibrated	1.38	18.2	155

Secondary Calibration Data

Gelex Obs	1.35	18.0	151
% Recovery	*97.8%*	*98.9%*	*97.4%*

Calibration OK

	Stray Light
measured	0.02
Correction	0.00

SAMPLE DATA

If measured NTU > 40 then sample must be diluted

Dilution factor(Df) calculated as: 1/(mL sample/total mL). Enter appropriate data

for mL sample and mL DI in the dilution columns, otherwise, leave columns blank

no entries are to be made in shaded cells

Detection Limit set at 0.05 NTU

Reporting Units	
NTU	*Record to*
0.0 - 1.0	0.05
1 - 10	0.1
10 - 40	1
40 - 100	5
> 100	10

The Instrument Performance Check (IPC) should be the mid-range Gelex Standard

IPC = **18.2** *NTU*

SAMPLE ID	Dilution mL sample	mL DI	Df	Measured NTU	Corrected NTU	NOTES
Blank (LRB)			**1.0**	0.00	**< 0.05**	*OK!*
IPC			**1.0**	17.9	**17.90**	*98.4%*
H12	0.25	49.75	**200.0**	14.1	**2820.00**	
H12 Dup	0.25	49.75	**200.0**	14.2	**2840.00**	*RPD=0.71%*
I12	0.25	49.75	**200.0**	14.1	**2820.00**	
J12	0.25	49.75	**200.0**	14.8	**2960.00**	
K12	0.25	49.75	**200.0**	14.8	**2960.00**	
L12	0.25	49.75	**200.0**	14.7	**2940.00**	
M12	0.25	49.75	**200.0**	14.9	**2980.00**	
N12	0.25	49.75	**200.0**	14.9	**2980.00**	
P12	0.25	49.75	**200.0**	15.0	**3000.00**	
Q12	0.25	49.75	**200.0**	14.9	**2980.00**	
Blank (LRB)			**1.0**	0.00	**< 0.05**	*OK!*
IPC			**1.0**	17.9	**17.90**	*98.4%*

TURBIDITY BENCHSHEET

Instrument: HACH 18900

Method: EPA 180.1

DATE:	8/1/06 - B
ANALYST:	UW

Primary Calibration Data

Primary Date 6/20/2006

Cal Date OK

	MEASUREMENT RANGE		
Gelex Stds	**0-2**	**0-20**	**0-200**
Calibrated	1.38	18.2	155

Secondary Calibration Data

Gelex Obs	1.36	17.9	150
% Recovery	*98.6%*	*98.4%*	*96.8%*

Calibration OK

	Stray Light
measured	0.02
Correction	0.00

SAMPLE DATA

If measured NTU > 40 then sample must be diluted

Dilution factor(Df) calculated as: 1/(mL sample/total mL). Enter appropriate data

for mL sample and mL DI in the dilution columns, otherwise, leave columns blank

no entries are to be made in shaded cells

Detection Limit set at 0.05 NTU

Reporting Units	
NTU	*Record to*
0.0 - 1.0	0.05
1 - 10	0.1
10 - 40	1
40 - 100	5
> 100	10

The Instrument Performance Check (IPC) should be the mid-range Gelex Standard

IPC = **18.2** *NTU*

SAMPLE ID	Dilution mL sample	mL DI	Df	Measured NTU	Corrected NTU	NOTES
Blank (LRB)			**1.0**	0.00	**< 0.05**	*OK!*
IPC			**1.0**	17.8	**17.80**	*97.8%*
H24	0.25	49.75	**200.0**	12.5	**2500.00**	
H24 Dup	0.25	49.75	**200.0**	12.4	**2480.00**	*RPD=0.8%*
I24	0.25	49.75	**200.0**	13.5	**2700.00**	
J24	0.25	49.75	**200.0**	13.3	**2660.00**	
K24	0.25	49.75	**200.0**	13.3	**2660.00**	
L24	0.25	49.75	**200.0**	13.6	**2720.00**	
M24	0.25	49.75	**200.0**	14.2	**2840.00**	
N24	0.25	49.75	**200.0**	14.0	**2800.00**	
P24	0.25	49.75	**200.0**	13.4	**2680.00**	
Q24	0.25	49.75	**200.0**	13.6	**2720.00**	
Blank (LRB)			**1.0**	0.00	**< 0.05**	*OK!*
IPC			**1.0**	17.8	**17.80**	*97.8%*

TURBIDITY BENCHSHEET

Instrument: HACH 18900

Method: EPA 180.1

DATE:	8/1/2006
ANALYST:	UW

Primary Calibration Data

Primary Date 6/20/2006

Cal Date OK

	MEASUREMENT RANGE		
Gelex Stds	**0-2**	**0-20**	**0-200**
Calibrated	1.38	18.2	155

Secondary Calibration Data

Gelex Obs	1.35	17.8	151
% Recovery	*97.8%*	*97.8%*	*97.4%*

Calibration OK

	Stray Light
measured	0.02
Correction	0.00

SAMPLE DATA

If measured NTU > 40 then sample must be diluted

Dilution factor(Df) calculated as: 1/(mL sample/total mL). Enter appropriate data for mL sample and mL DI in the dilution columns, otherwise, leave columns blank

no entries are to be made in shaded cells

Detection Limit set at 0.05 NTU

Reporting Units	
NTU	*Record to*
0.0 - 1.0	0.05
1 - 10	0.1
10 - 40	1
40 - 100	5
> 100	10

The Instrument Performance Check (IPC) should be the mid-range Gelex Standard

IPC = **18.2** *NTU*

SAMPLE ID	Dilution mL sample	mL DI	Df	Measured NTU	Corrected NTU	NOTES
Blank (LRB)			**1.0**	0.00	**< 0.05**	*OK!*
IPC			**1.0**	17.8	**17.80**	*97.8%*
H48	0.25	49.75	**200.0**	9.20	**1840.00**	
H48 Dup	0.25	49.75	**200.0**	9.20	**1840.00**	*RPD=0%*
I48	0.25	49.75	**200.0**	10.50	**2100.00**	
J48	0.25	49.75	**200.0**	11.30	**2260.00**	
K48	0.25	49.75	**200.0**	11.50	**2300.00**	
L48	0.25	49.75	**200.0**	11.80	**2360.00**	
M48	0.25	49.75	**200.0**	12.00	**2400.00**	
N48	0.25	49.75	**200.0**	12.1	**2420.00**	
P48	0.25	49.75	**200.0**	11.8	**2360.00**	
Q48	0.25	49.75	**200.0**	12.2	**2440.00**	
Blank (LRB)			**1.0**	0.00	**< 0.05**	*OK!*
IPC			**1.0**	17.8	**17.80**	*97.8%*

TURBIDITY BENCHSHEET

Instrument: HACH 18900

Method: EPA 180.1

DATE:	8/9/2006
ANALYST:	UW

Primary Calibration Data

Primary Date 6/20/2006

Cal Date OK

	MEASUREMENT RANGE		
Gelex Stds	**0-2**	**0-20**	**0-200**
Calibrated	1.38	18.2	155

Secondary Calibration Data

Gelex Obs	1.35	17.8	150
% Recovery	*97.8%*	*97.8%*	*96.8%*

Calibration OK

	Stray Light
measured	0.02
Correction	0.00

SAMPLE DATA

If measured NTU > 40 then sample must be diluted

Dilution factor(Df) calculated as: 1/(mL sample/total mL). Enter appropriate data for mL sample and mL DI in the dilution columns, otherwise, leave columns blank

no entries are to be made in shaded cells

Detection Limit set at 0.05 NTU

Reporting Units	
NTU	*Record to*
0.0 - 1.0	0.05
1 - 10	0.1
10 - 40	1
40 - 100	5
> 100	10

The Instrument Performance Check (IPC) should be the mid-range Gelex Standard

IPC = 18.2 *NTU*

SAMPLE ID	Dilution mL sample	Dilution mL DI	Df	Measured NTU	Corrected NTU	NOTES
Blank (LRB)			1.0	0.00	< 0.05	*OK!*
IPC			1.0	17.8	17.80	*97.8%*
H 96	0.25	49.75	200.0	3.1	620.00	
H 96 Dup	0.25	49.75	200.0	3.1	620.00	*RPD=0%*
I96	0.25	49.75	200.0	8.8	1760.00	
J 96	0.25	49.75	200.0	9.2	1840.00	
K 96	0.25	49.75	200.0	10.0	2000.00	
L 96	0.25	49.75	200.0	9.9	1980.00	
M 96	0.25	49.75	200.0	10.7	2140.00	
N 96	0.25	49.75	200.0	10.8	2160.00	
P 96	0.25	49.75	200.0	11.1	2220.00	
Q 96	0.25	49.75	200.0	11.0	2200.00	
Blank (LRB)			1.0	0.00	< 0.05	*OK!*
IPC			1.0	17.8	17.80	*97.8%*

TURBIDITY BENCHSHEET

Instrument: HACH 18900

Method: EPA 180.1

DATE:	8/4/2006
ANALYST:	KE 16:52

Primary Calibration Data

Primary Date 6/20/2006

Cal Date OK

	MEASUREMENT RANGE		
Gelex Stds	**0-2**	**0-20**	**0-200**
Calibrated	1.38	18.2	155

Secondary Calibration Data

Gelex Obs	1.36	17.8	152
% Recovery	*98.6%*	*97.8%*	*98.1%*

Calibration OK

	Stray Light
measured	0.02
Correction	0.00

SAMPLE DATA

If measured NTU > 40 then sample must be diluted

Dilution factor(Df) calculated as: 1/(mL sample/total mL). Enter appropriate data for mL sample and mL DI in the dilution columns, otherwise, leave columns blank

no entries are to be made in shaded cells

Detection Limit set at 0.05 NTU

Reporting Units	
NTU	*Record to*
0.0 - 1.0	0.05
1 - 10	0.1
10 - 40	1
40 - 100	5
> 100	10

The Instrument Performance Check (IPC) should be the mid-range Gelex Standard

IPC = **18.2** *NTU*

SAMPLE ID	**Dilution** mL sample	mL DI	**Df**	**Measured NTU**	**Corrected NTU**	**NOTES**
Blank (LRB)			**1.0**	0.00	**< 0.05**	*OK!*
IPC			**1.0**	17.9	**17.90**	*98.4%*
H 96	0.25	49.75	**200.0**	0.41	**82.00**	
I 96	0.25	49.75	**200.0**	0.99	**198.00**	
J 96	0.25	49.75	**200.0**	1.1	**220.00**	
K 96	0.25	49.75	**200.0**	1.1	**220.00**	
L 96	0.25	49.75	**200.0**	1.2	**240.00**	
M 96	0.25	49.75	**200.0**	1.3	**260.00**	
N 96	0.25	49.75	**200.0**	1.4	**280.00**	
P 96	0.25	49.75	**200.0**	1.2	**240.00**	
Q 96	0.25	49.75	**200.0**	1.1	**1.10**	
Q 96 Dup	0.25	49.75	**200.0**	1.0	**1.00**	*RPD=9.52%*
Blank (LRB)			**1.0**	0.00	**< 0.05**	*OK!*
IPC			**1.0**	17.7	**17.70**	*97.3%*

174

TURBIDITY BENCHSHEET

Instrument: HACH 18900

Method: EPA 180.1

DATE:	8/8/2006
ANALYST:	UW

Primary Calibration Data

Primary Date 6/20/2006

Cal Date OK

	MEASUREMENT RANGE		
Gelex Stds	**0-2**	**0-20**	**0-200**
Calibrated	1.38	18.2	155

Secondary Calibration Data

Gelex Obs	1.34	17.9	150
% Recovery	*97.1%*	*98.4%*	*96.8%*

Calibration OK

	Stray Light
measured	0.02
Correction	0.00

SAMPLE DATA

If measured NTU > 40 then sample must be diluted

Dilution factor(Df) calculated as: 1/(mL sample/total mL). Enter appropriate data

for mL sample and mL DI in the dilution columns, otherwise, leave columns blank

no entries are to be made in shaded cells

Detection Limit set at 0.05 NTU

Reporting Units	
NTU	*Record to*
0.0 - 1.0	0.05
1 - 10	0.1
10 - 40	1
40 - 100	5
> 100	10

The Instrument Performance Check (IPC) should be the mid-range Gelex Standard

IPC = **18.2** *NTU*

SAMPLE ID	Dilution mL sample	mL DI	Df	Measured NTU	Corrected NTU	NOTES
Blank (LRB)			**1.0**	0.00	**< 0.05**	*OK!*
IPC			**1.0**	17.8	**17.80**	*97.8%*
I 174	1.0	49.5	**50.5**	12.5	**631.25**	
I 174 Dup	1.0	49.5	**50.5**	12.1	**611.05**	*RPD=3.25%*
J 174	0.5	49.5	**100.0**	13.6	**1360.00**	
K 174	0.5	49.5	**100.0**	15.3	**1530.00**	
L 174	0.5	49.5	**100.0**	16.0	**1600.00**	
M 174	0.5	49.5	**100.0**	16.4	**1640.00**	
N 174	0.5	49.5	**100.0**	17.6	**1760.00**	
P 174	0.5	49.5	**100.0**	17.9	**1790.00**	
Q 174	0.5	49.5	**100.0**	18.2	**1820.00**	
Blank (LRB)			**1.0**	0.00	**< 0.05**	*OK!*
IPC			**1.0**	17.8	**17.80**	*97.8%*

240 4

TURBIDITY BENCHSHEET

Instrument: HACH 18900

Method: EPA 180.1

DATE:	9/10/2006
ANALYST:	UW

Primary Calibration Data

Primary Date 6/20/2006

Cal Date OK

	MEASUREMENT RANGE		
Gelex Stds	**0-2**	**0-20**	**0-200**
Calibrated	1.38	18.2	155

Secondary Calibration Data

Gelex Obs	1.34	17.8	152
% Recovery	*97.1%*	*97.8%*	*98.1%*

Calibration OK

	Stray Light
measured	0.02
Correction	0.00

SAMPLE DATA

If measured NTU > 40 then sample must be diluted

Dilution factor(Df) calculated as: 1/(mL sample/total mL). Enter appropriate data

for mL sample and mL DI in the dilution columns, otherwise, leave columns blank

no entries are to be made in shaded cells

Detection Limit set at 0.05 NTU

Reporting Units	
NTU	*Record to*
0.0 - 1.0	0.05
1 - 10	0.1
10 - 40	1
40 - 100	5
> 100	10

The Instrument Performance Check (IPC) should be the mid-range Gelex Standard

IPC = **18.2** *NTU*

SAMPLE ID	**Dilution** mL sample	mL DI	**Df**	**Measured NTU**	**Corrected NTU**	**NOTES**
Blank (LRB)			**1.0**	0.00	**< 0.05**	*OK!*
IPC			**1.0**	17.8	**17.80**	*97.8%*
I 240	1.0	49.0	**50.0**	7.50	**375.00**	
I 240 Dup	1.0	49.0	**50.0**	7.50	**375.00**	*RPD=0%*
J 240	1.0	49.0	**50.0**	7.80	**390.00**	
K 240	0.5	49.5	**100.0**	15.2	**1520.00**	
L 240	0.5	49.5	**100.0**	12.5	**1250.00**	
M 240	0.5	49.5	**100.0**	13.8	**1380.00**	
N 240	0.5	49.5	**100.0**	15.5	**1550.00**	
P 240	0.5	49.5	**100.0**	15.1	**1510.00**	
Q 240	0.5	49.5	**100.0**	15.4	**1540.00**	
Blank (LRB)			**1.0**	0.00	**< 0.05**	*OK!*
IPC			**1.0**	17.8	**17.80**	*97.8%*

ANALYTICAL RESOURCES INCORPORATED

ATTERBERG LIMIT DETERMINATION – ASTM D-4318

0038

Client / Project No.: ANCHOR ENVIRONMENTAL
ARI Job No.: JQ30

Tested by: TM
Set-Up Date: 8/4/06

	A			B								
	Sample #:			Sample #:			Sample #: B-Repo			Sample #:		
	Depth:			Depth:			Depth:			Depth:		
	Description:			Description:			Description:			Description:		
	Through #40: yes/no			Through #40: yes/no			Through #40: yes/no			Through #40: yes/no		
LIQUID LIMIT	Test #:			Test #:			Test #:			Test #:		
	Crucible #: 13			Crucible #: 11			Crucible #:			Crucible #:		
No. Blows				22	25	21		20	20			
Tare #				144	241	3		Repo-1	Repo-2			
Tare Wt.				1.4837	1.4838	1.4834		1.4478	1.4454			
Wt. Wet Soil + Tare	NON-PLASTIC			8.5001	9.0379	7.1269		11.0169	9.4216			
Wt. Dry Soil + Tare				5.9627	6.3472	5.1300		7.4947	6.5068			
Wt. Dry Soil												
Wt. Water												

PLASTIC LIMIT												
Tare #				4	5							
Tare Wt.			TM	1.4998	1.4786							
Wt. Wet Soil + Tare				5.8380	5.2294							
Wt. Dry Soil + Tare				4.7596	4.3014							
Wt. Dry Soil												
Wt. Water												

NOTES:

NP = Non-plastic

1105F
Rev. 0

ANALYTICAL RESOURCES INCORPORATED

SPECIFIC GRAVITY DETERMINATION – ASTM D-854

Job #: JQ30
Project #:

Tested by: tm
Set-Up Date: 8/13/06

Method A (moist) X (for entire sample) Method B (oven-dried) X (for ± 200)

BEAKER	A	BA	BB	AE	ED	IIX		
Sample ID	A	‡ B	A +200	B +200	A -200	B -200		
Flask No.	1	2	3	tm ~~4~~ 4	5	6		
Flask Wt. (g)	180.32	183.39	183.99	tm ~~[illegible]~~ 184.85	187.63	181.80		
Soil Wt. (g)	150.78	101.50	101.81	67.00 *	50.66	52.88		
Vacuum: Start Time	18:45	18:45	18:45	18:45	18:45	18:45		
End Time	20:45	20:45	20:45	20:45	20:45	20:45		
Insulated Cooler: Date In	8/13/06	8/13/06	8/13/06	8/13/06	8/13/06	8/13/06		
Date Out	8/14/06	8/14/06	8/14/06	8/14/06	8/14/06	8/14/06		
Flask, Soil, Water Wt. (g)	741.68	718.03	745.57	724.43	715.75	711.30		
Temperature (° C)	22.6	22.7	22.7	22.6	22.7	22.7		
Tare No.	62	41	71	77	42	59		
Tare Wt. (g)	208.88	169.34	162.16	169.04	103.04	108.17		
Tare + Dry Soil Wt. (g)	308.85	227.79	262.59	235.19	151.42	158.44		
Initials	tm	tm	tm	tm	tm	tm		
Specific Gravity	* 2.70	2.64	2.69	2.62	2.62	2.63		

‡ Sample B has Some WOODY MATTER

Recommended Dry Mass for Test Specimen: 500 mL Pycnometer

Poorly Graded Sand-Silty Sand	100 ± 10 g
Silty or Clayey Sand	75 ± 10 g
Silt or Clay	50 ± 10 g

* FAIRY MATERIAL formed on Sample A

* WEIGHT CHANGED [illegible]

1106F
Rev. 1, 09/03

0039

Hydrometer Analysis - ASTM D-422

ARI Job No.: 1030 ARI Sample No.: A
Client Sample Number:
Description: Fine sand, silt, some Gravel
Method of size reduction: Quartering [ ] Sample Splitter [ ] Whole Sample [ ]

Moisture Content	
Tare Number	1030
Tare Weight	1.44
Wet Soil + Tare (g)	29.16
Dry Soil + Tare (g)	27.40

Tare Number	1030 A
Tare Weight (g)	10.44
Weight Total Sample (g) (Air-dried, not sieved)	397.89
Weight Hydro Test Sample (g)	83.87
Tare + Oven Dry Plus #10 (g)	21.83
Tare + Oven Dry After # 200 Wash (g) (Plus #10 Included)	75.97

Date Set Up 8/3/06
Technician: gs
Hydro Beaker: AI
Hydro #: 199344
Calgon Batch #: 137

Place	8/8/2006 TIME	Δ Time	Test Cylinder	Calgon Blank	Temp (°C)
	9:18:00	START			
	9:19:00	1	29.5	5	22.5
	9:20:00	2	27	5	22.5
	9:23:00	5	23.5	5	22.5
	9:33:00	15	20.5	5	22.5
	9:48:00	30	18	5	22.5
	10:18:00	60	15.5	5	22.5
	13:28:00	250	12.5	5	23
	9:18:00	1440	10	5	23

Sieve Analysis
Date Sieved: 8/10/06 Technician: tm Sieve Set # 3

Sieve Size	Cumulative Weight
Empty Tare	10.43
2"	
1"	
3/4	
1/2	14.28
3/8	15.27
#4	18.60
#10	21.46
#20	23.20
#40	38.62
#60	62.90
#100	70.98
#200	75.26
Pan	75.98

140 = 73.16

1101F-A
Rev. 0

Hydrometer Analysis - ASTM D-422

ARI Job No.: JQ30 ARI Sample No.: B
Client Sample Number:
Description: Fine Silty Sand
Method of size reduction: Quartering [ ] Sample Splitter [ ] Whole Sample [ ]

Moisture Content	
Tare Number	JQ30B
Tare Weight	1.43
Wet Soil + Tare (g)	24.50
Dry Soil + Tare (g)	22.83

Tare Number	JQ30B
Tare Weight (g)	10.50
Weight Total Sample (g) (Air-dried, not sieved)	249.31
Weight Hydro Test Sample (g)	74.92
Tare + Oven Dry Plus #10 (g)	10.91
Tare + Oven Dry After # 200 Wash (g) (Plus #10 Included)	34.78

Date Set Up 8/3/06
Technician: gs
Hydro Beaker: AC
Hydro #: 199344
Calgon Batch #: 137

	8/8/2006 TIME	Δ Time	Test Cylinder	Calgon Blank	Temp (°C)	
Place	9:27:00	START				
	9:28:00	1	46	5	22.5	T
	9:29:00	2	43	5	22.5	T
	9:32:00	5	39	5	22.5	T
	9:42:00	15	32.5	5	22.5	
	9:57:00	30	28	5	22.5	
	10:27:00	60	24	5	23	
	13:37:00	250	18.5	5	23	
	9:27:00	1440	14.5	5	23	

Sieve Analysis
Date Sieved: 8/10/06 Technician: tm Sieve Set # 4

Sieve Size	Cumulative Weight
Empty Tare	10.48
2"	
1"	
3/4	
1/2	
3/8	
#4	10.72
#10	10.90
#20	11.19
#40	15.90
#60	26.25
#100	29.70
#200	33.99
Pan	34.81

140 = 31.39

20 20 20

1101F-A
Rev. 0

ANALYTICAL RESOURCES INCORPORATED

MOISTURE CONTENT DETERMINATION – ASTM D-2216

Client: Anchor
Project: JQ30

Tested by: H Benny
Set-up Date: 7/29/06

Client Sample ID	ARI Sample Number	Depth (ft)	Tare #	Wt. Tare (g)	Wt. Wet Soil + Tare (g)	Wt. Dry Soil + Tare (g)	Date/Time in Oven	Date/Time out Oven	Notes: MC%
Comp1			1	10.43	417.50	263.95	7/29/06	7/31/06	60.6
Comp2			2	10.39	313.78	187.19	7/31/06	8/1/06	71.6

0042

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Rev. 0